

Shape Security Offers Revolutionary Internet Security System to JPMorgan Chase

ShapeShifter

Shape Security presents a new revolutionary Internet technology called ShapeShifter. ShapeShifter is a security system that physically plugs into a network and manipulates a website's coding. This system does not require a company to readjust their system.

Cyber-Attacks can have an adverse affect on a business. From a study conducted by IBM, on average, an attack can cost a company approximately \$300,000. Also, companies are attacked approximately 2 million times a week.

In recent news, Heartbleed is an information leak that roughly 81% of sites are vulnerable to. The Heartbleed bug sends a malicious heartbeat signal that could force a computer to divulge secret information stored in its memory. Heartbleed exposes usernames and passwords through manipulation of code.

ShapeShifter is a comprehensive defense system against major web attacks. ShapeShifter disables the capability of malware to interact with the website. Real-time Polymorphism:

```
BEFORE
<form action="login_form.php">
  <input id="username" name="username" />
  <input id="password" name="password" />
  <input id="rememberMe" name="rememberMe" />
  <input id="login" name="login" />
  <input type="submit" />
</form>
Simplified HTML

AFTER
<form action="d94M2eQgBK">
  <input id="v6DbNQEs4z" name="dtTtA6tsm1" />
  <input id="b5KbBSjCT6" name="rWtCLcv3f" />
  <input id="zQNA3ZBgKz" name="R2bHEe3taV" />
  <input id="rvnFbpxKwN" name="HNnQwnUbtm" />
  <input type="submit" />
</form>
Simple real-time polymorphism
New code generated on each page request
```

This is an illustration of how real-time polymorphism works in action. As noted in the white text, before the implementation of polymorphism, it is possible to clearly read the

HTML code, which is represented in the white text. However after polymorphism is implemented, it becomes impossible to read and decode the HTML because it is distorted, which is depicted by the text in yellow. This occurs every time the page is loaded. In other words, the distorted code will continue to change and become a different distorted code each time the page is refreshed. Essentially, real-time polymorphism will make it virtually impossible for cybercriminals or other malware bots to steal vital information that any company is trying to keep secure.

There are a few companies who have already taken the proactive steps into protecting their company with a higher security system. Investing in ShapeShifter in order to prevent further security breaches is the best way to ensure a company's information is protected. Many investors understand the potential that Shapeshifter offers; most notably is Google, which has backed-up ShapeShifter from its infancy. In total, investors have invested around \$66 million dollars in ShapeShifter.

Because ShapeShifter is still in production, there is no set cost, although the cost of the device is speculated to be in the 6 digit range. JP Morgan Chase spends billions of dollars on technology, with having spent 8 billion dollars within the last year, with approximately 250 million of that being invested into IT security. The cost for this product is little to nothing compared to what can be lost from being vulnerable without ShapeShifter. Not only could money be lost from yet another security breach, but not investing in a high technology future such as ShapeShifter can also risk a company's reputation in the banking industry, as well as potential loss of consumer loyalty.

Consumer protection is a top priority for the banking industry. Having to maintain privacy for thousands of passwords, bank accounts, and bank statements requires JP Morgan Chase to establish a safe and credible environment for user and consumers. Moreover, since the risk of electronic information is always on the rise, it is imperative for JP Morgan Chase to constantly seek new and innovative ways to meet the demands of changing cyber security. ShapeShifter offers the greatest potential for combating these new issues surrounding cyber security. We are confident that ShapeShifter will revolutionize the way JP Morgan Chase will protect its consumers and itself when interacting on the Internet.